01-110 The Harvest and Use of Non-Salmon Species in the Copper River Basin

Investigators: Alaska Department of Fish and Game, Division of Subsistence; Copper River Native Association; Chitina Village Council; Cheesh'na Village Council; Mentasta Tribal Council; Dr. James Kari

FY2001 Budget: \$120,000 **Total Budget (two years):** \$170,323

Geographic Area: Cook Inlet-Gulf of Alaska **Information Type:** Harvest Monitoring and TEK

<u>Issue:</u> As the Copper River basin attracts more non-local fishers, some of the important non-salmon subsistence species are subject to allocation conflicts and conservation issues.

This project will determine:

- 1. Current patterns and trends of the harvest and use of non-salmon species (trout, steelhead, burbot, grayling, and whitefish) in the Copper River Basin.
- 2. Historical patterns of harvest and use of these species in the Copper River Basin.
- 3. Long-term changes in the ecology of non-salmon species through the documentation of traditional ecological knowledge (TEK).

Objectives:

- 1. Using quantitative methods, document the current harvest and use of non-salmon species in the Copper River Basin.
- Record the traditional ecological knowledge of Ahtna elders and other residents of the region as related to the ecology of non-salmon species.
- 3. Record the extent of historic use of non-salmon species.
- 4. Develop mapped data on contemporary and historic fishing sites for non-salmon species.

Methods: This project has three components: first, document current harvests and use of non-salmon fish in the Copper River Basin, including data on fishing sites and seasonality of harvests. Second, gather local knowledge on the ecology of non-salmon species including the distribution of specific species, the development of local taxonomies, and local knowledge of spawning areas. Third, collect data on the historical use of non-salmon species. Methods include an area wide harvest survey and open ended and directed interviews with Ahtna Elders and other long-term residents of the region. Dr. James Kari will interview Ahtna Elders in the Ahtna language. The mapping portion of this project (objective no. 4) is to be completed by the village of Mentasta, which is developing GIS capabilities.

<u>Products:</u> In collaboration with four tribal entities, Subsistence Division staff will prepare a written report that will include a discussion, analysis, and summaries of both qualitative and quantitative data collected during the research phase. Maps will be provided through a cooperative effort with the Mentasta Village Council.

Experience of Investigators:

The Division of Subsistence has conducted sociocultural research and subsistence harvest assessments on the Copper River since the early 1980s. Members of the Subsistence Division staff have conducted anthropological fieldwork in the area since the late 1970s. In 1996 the Division conducted a study of the subsistence fishery in cooperation with the Copper River Native Association that resulted in a report on the fishery presented to the Alaska Board of Fisheries. This research included interviewing Ahtna and non-Native participants in the fishery, collecting traditional knowledge from elders and compiling mapped data and archival material on the fishery. Dr. James Kari has worked in the Copper River basin as a linguist for over 20 years and has published significant works in the Ahtna language including the Ahtna dictionary.

Partnerships/Collaboration: For the current project, the collaborating tribes will be responsible for hiring tribal members to conduct harvest interviews in their villages. Gloria Stickwan of the Copper River Native Association (CRNA) will hire one person to conduct harvest surveys in the member villages. She will also hire a transcriber and an elder to transcribe and annotate taped interviews. CRNA has also included, as part of their proposed budget, money for a meeting to discuss research results. Arleen Lenard of the Chitina Village Council will hire two temporary staff to conduct harvest interviews in the Chitina area. Joe Hicks of the Cheesh'na Village Council will conduct the interviews in the Chistochina area. The Mentasta Tribal Council will hire tribal members to conduct interviews in and around Mentasta. They have also contracted to produce the maps for the project. At the end of the project there will be a meeting of the principal investigator and all of the tribal entities to discuss the results.

Recommendation:

This project extends a very effective collaborative research approach from last year, turning to documentation of harvest patterns and Traditional Ecological Knowledge for non-salmon species in the Copper River basin. This project is recommended for funding.

Justification:

By documenting uses of and knowledge about non-salmon species, this project helps to achieve a comprehensive view of Copper River subsistence fishing as a dynamic system. Although Federal management issues concerning conservation and allocation of these species are less acute than with salmon, there is far less basic information about the role of freshwater species in local subsistence adaptations. This project will provide information on changes in stocks and harvest practices over time. When combined with the salmon study, it becomes possible to analyze interactions and redirection of effort from salmon to nonsalmon species, among harvest areas and seasons. Also of strategic value, this study helps to firmly establish a strong new method, particularly by providing for new Ahtna language interviews and translations of previously taped interviews. This project employs the technical approach proven successful in the salmon project, including appropriate use of a standardized questionnaire, and extended interviews with key Ahtna Elders and other long-time residents. Participation of an linguist fluent in Ahtna and well known to Ahtna elders, is also an unusual strength of the technical approach. An ambitious sampling target is offered, though discrepancies on pages 3 (500 interviews) and page 4 (685 interviews) should be clarified. The investigation team is exceptionally experienced and accomplished. In addition, this project adopted a very ambitious model of partnerships, with tribal partners assuming significant responsibility for conducting and reporting interviews in their communities.